

CLAIMS

1. A printer comprising:
one or more consumable components, each consumable component having an image zone and a non-use zone;
5 a protective housing enclosing each of the one or more consumable components, each protective housing having an exposure gap through which image information is transferred to or from a consumable component during a printing process;
a printer driver module configured to control the transfer of image
10 information to and from each image zone through an exposure gap and position each non-use zone at an exposure gap during periods of nonprinting.
2. A printer as recited is claim 1, wherein the printer driver module is further configured to avoid transferring image information to a non-use zone.
- 15 3. A printer as recited is claim 1, wherein each non-use zone is designated by the printer driver module.
4. A printer as recited is claim 1, wherein the printer driver module is stored
20 on and executes on a host computer.
5. A printer comprising:
one or more consumable components, each consumable component comprising a process surface, the process surface comprising a non-use zone;
25 a protective housing enclosing each consumable component, the protective housing comprising an exposure gap, wherein the process surface translates past the exposure gap;

printer control logic that positions each non-use zone at an exposure gap during periods of nonprinting.

6. A printer as recited in claim 5, wherein the process surface further
5 comprises an image zone that is exposed to image information during periods of printing.

7. A printer as recited is claim 5, wherein the printer control logic avoids transferring image information to a non-use zone.

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8. A printer as recited is claim 5, wherein the non-use zone is designated by the printer control logic.

9. A printer as recited is claim 6, wherein the image zone is designated by
15 the printer control logic.

10. A printer as recited is claim 5, wherein the printer control logic is stored on and executes on a host computer.

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11. A printer comprising:

an intermediate transfer belt comprising an image zone and a non-use zone;

a protective housing encasing the intermediate transfer belt, the protective housing having a gap for exposing the image zone to image information during a
25 printing process; and

printer control logic that positions the non-use zone at the gap during periods of nonprinting.

12. A printer as recited is claim 11, wherein the printer control logic is configured to transfer image information to the image zone and not to the non-use zone during periods of printing.

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13. A printer as recited is claim 11, wherein the printer control logic designates the non-use zone.

14. A printer as recited is claim 11, wherein the printer control logic
10 designates the image zone.

15. A printer as recited is claim 11, wherein the printer control logic is located on a host computer and executes on the host computer.

15 16. A printer comprising:

an insertable cartridge comprising a photoconductor drum and an intermediate transfer belt, the photoconductor drum and intermediate transfer belt each configured with an image zone and a non-use zone;

the cartridge further comprising a protective housing having an exposure
20 gap for the photoconductor drum and an exposure gap for the intermediate transfer belt;
and

printer driver logic configured to control the transfer of image information to and from each image zone through the exposure gaps during periods of printing, and position each non-use zone at an exposure gap during periods of nonprinting.

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17. A printer as recited is claim 16, wherein the printer driver logic is further configured to avoid transferring image information to a non-use zone.

18. A printer as recited is claim 16, wherein each non-use zone is designated by the printer driver logic.

5 19. A printer as recited is claim 16, wherein the printer driver logic is located on a host computer and executes on the host computer.

20. A printer having one or more insertable consumable components, each consumable component including a process surface enclosed in a protective housing
10 having an exposure gap, the printer comprising:

printer control logic to designate a region of the process surface as a non-use zone, and to position the non-use zone at the exposure gap during periods of nonprinting.

15 21. A printer as recited in claim 20, wherein the printer control logic designates a region of the process surface as an image zone and controls the exposure of the image zone to image information during periods of printing.

22. A printer as recited is claim 20, wherein the printer control logic avoids
20 transferring image information to the non-use zone during periods of printing.

23. A printing system comprising:
a printer;
one or more consumable components insertable into the printer, each
25 consumable component having an image zone and a non-use zone;
a protective housing enclosing each of the one or more consumable components, each protective housing having an exposure gap through which image

information is transferred to or from a consumable component during periods of printing;

a host computer coupled to the printer and comprising printer control logic, the printer control logic configured to control the transfer of image information to
5 and from each image zone through an exposure gap during periods of printing and position each non-use zone at an exposure gap during periods of nonprinting.

24. A printing system as recited is claim 23, wherein the printer control logic is further configured to avoid transferring image information to a non-use zone.

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25. A printing system as recited is claim 23, wherein each non-use zone is designated by the printer control logic.

26. A printing system as recited is claim 23, wherein each image zone is
15 designated by the printer control logic.

27. A printing system as recited is claim 23, wherein the printer control logic is located on and executes on the printer.

20 28. A method of printing using a print device, the print device comprising one or more consumables, each consumable comprising a process surface and each consumable enclosed in a protective housing having an exposure gap, the method comprising:

designating a region of the process surface as a non-use zone;

25 avoiding the transfer of image information to the non-use zone during periods of printing; and

positioning the non-use zone at an exposure gap during periods of nonprinting.

29. The method as recited in claim 28, further comprising:
5 designating a region of the process surface as an image zone; and
controlling the process surface to facilitate the transfer of image information to and from the image zone during periods of printing.

30. Computer-readable media having computer-readable instructions for
10 performing the method as recited in claim 28.

31. A method for protecting a consumable component of a printing device, the consumable component encased within a protective housing having an exposure gap, the method comprising:
15 defining a region of the consumable component as a non-use zone;
positioning the non-use zone at the exposure gap during periods of nonprinting.

32. The method as recited in claim 31 further comprising:
20 avoiding the transfer of image information to the non-use zone during periods of printing.

33. The method as recited in claim 31, further comprising:
defining a region of the consumable component as an image zone; and
25 during periods of printing,
transferring image information to and from the image zone; and
avoiding the transfer of image information to the non-use zone.

34. The method as recited in claim 31, wherein the consumable component is an intermediate transfer belt, the method further comprising:

5 defining a region of the intermediate transfer belt as an image zone; and
 exposing the image zone to a print medium through the exposure gap during periods of printing.

35. The method as recited in claim 31, wherein the consumable component is a photoconductor, the method further comprising:

10 defining a region of the photoconductor as an image zone; and
 exposing the image zone to a print medium through the exposure gap during periods of printing.

36. The method as recited in claim 31, wherein the consumable component is
15 a photoconductor, the method further comprising:

 defining a region of the photoconductor as an image zone; and
 forming an image on the image zone by exposing the image zone to a photoelectric imaging process and dusting the image zone with toner through the exposure gap.

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37. Computer-readable media having computer-readable instructions for performing the method as recited in claim 31.